

## **Rapporteur's Report on WTO, Economic Growth and Environmental Sustainability**

**Rapporteur: D M Diwakar<sup>1\*</sup>**

### **I**

#### **CONTEXT**

The economic literature enlightens us with theoretical discourse between trade and growth, which can be traced in the organised thoughts of Mercantilism during the 16th to 18th century (Haney, 1949), where bilateral trade was the instrument for accumulation and possession of precious metals (i.e., gold and silver) through the policy of maximising export and minimising import for surplus generation. However, this policy regulation of protectionism was challenged in the 18th century by Physiocrats (Quesnay, 1758). They argued for laissez-faire and the agriculture sector as a surplus generator. Classical economists argued that phenomena of trade are based on absolute advantage, i.e., climate, resources and geography (Smith, 1776) and comparative advantage (Ricardo, 1817) for efficient trade and global prosperity with a specialised tradeoff for protection of infant industry (Bastable, 1903; Hckscher, 1919; and Ohlin, 1933). Later, the concept of relative demand for trading countries was elaborated upon in the Theory of Reciprocal Demand (Mill, 1848), which defined the terms of trade, building on Ricardo's work. This was further developed geometrically as an Offer Curve for trading countries (Marshall, 1923). Purchasing power parity and deviations in international exchange were introduced into trade discourse by Cassel (1916, 1918). Agricultural price elasticity and industrial price rigidity and their long-term implications on respective terms of trade against primary commodity and developing nations remained bone of contention, as to why agriculture suffers (Prebisch 1950 & Singer, 1950) which has been validated empirically through Grilli-Yang (1988) Price Index and updated (Pfaffenzeller, et.al., 2007; and Fernandez, 2019) for long term variations in commodity prices and terms of trade against primary goods and developing nations. In my opinion, this long-term empirical evidence needs to be taken into account when analysing trade by rules.

We all know that the realisation of trade by rules, rather than by Politics, among global trading countries for multilateral trade gradually emerged stronger with the expansion of economic interactions among countries after the Second World War. The genesis of the emergence of the institution of trade by rules, i.e., the WTO, is rooted in the Bretton Woods Conference of 1944, when it was resolved to establish

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<sup>1</sup>Former Director & Professor of Economics, A N Sinha Institute of Social Studies, Patna, presently associated with Development Research Institute, Jalsain 847411, Bihar. Email id: dm diwakar@gmail.com.

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the International Trade Organisation (ITO), along with the International Monetary Fund (IMF) and International Bank of Reconstruction and Development (IBRD). Although the Havana Charter of ITO was drafted in 1948, it was never established, as the US Senate did not ratify the agreement. Therefore, the General Agreement on Tariffs and Trade (GATT), signed by 23 countries in 1947, remained the operational instrument of multilateral trade. Thus, a treaty-based seven-round negotiation (1949-1979) continued until the WTO came into force through various rounds, including the Uruguay (1986-1994) and the Marrakesh/Washington Consensus (1995) rounds (WTO, 1998). Since then, the WTO has been expanding its scope through various rounds of ministerial meetings.

The WTO framework of the Agreement on Agriculture (AoA) has broadly three components: 1. Market Access, 2. Domestic Support and 3. Export Subsidies (WTO, 2003). The implications of SPS measures and the Amber, Blue, and Green Boxes for safeguarding countries' interests remained debatable. Recently, ministerial rounds have also included discussions on environmental sustainability. However, the concerns of providing a level playing field to developing nations remained a serious challenge (Diwakar, 2005). India joined the World Trade Organisation (WTO) in 1995, which brought new market access, yet reduced domestic policy freedom and environmental resource availability. The current Indian agricultural sector faces three major challenges: fulfilling its WTO obligations, protecting environmental resources, and ensuring food security for an expanding population.

The 85th Annual Conference of the Indian Society of Agricultural Economics (ISAE) resolved to discuss "WTO, Economic Growth, and Environmental Sustainability: Navigating Intersection" as its third theme. The research papers under this theme demonstrate the existing conflicts between trade agreements and agricultural development and sustainability, while showing how India can achieve international market access without compromising its domestic needs. A total of 40 papers on various topics, covering international trade in agriculture, horticulture, vegetables, and dairy products, were submitted for discussion under this theme. All papers were interesting, but a few of them were more rigorous and focused with statistical precision. Moreover, due to space constraints, 29 papers were considered (8 full papers, given their diversified coverage, and 21 summaries) and organised into four distinct areas for discussion.

- How do trade liberalisation, export expansion and global market integration affect environmental sustainability, carbon emissions and resource utilisation?
- How do food safety regulations and animal/plant health standards implemented through SPS measures affect agricultural trade patterns and farmer market participation in domestic and international markets?

- How do regional trade agreements and bilateral agreements between India and other nations affect trade performance and market integration?
- India's agricultural export performance has been analysed through empirical studies, which examine market trends, competitive advantages, and the effectiveness of trade policies.

This report examines the different themes explored by the paper writers, as indicated in the suggestive outline of conference themes for potential contributors. It highlights issues for discussion at the forthcoming conference. While most of the papers submitted for discussion covered broad issues mentioned in the outline, some issues remained relatively unexplored. It is expected that the issues listed below will be addressed in the various sessions during the conference.

The keynote paper on the theme succinctly summarises the evolving trade regime, current stalemates and emerging challenges in agricultural trade. It highlights increasing disruptions and increased volatility in international markets, marking a departure from the long-standing most-favoured-nation trading framework. Given that agriculture remains the backbone of rural livelihoods and the engine of economic growth in most developing countries, a sudden global shock can impact domestic markets, leading to price volatility, disruptions in supply chains, and income losses for farming communities. The agricultural exporters are facing a new wave of sustainability-linked unilateral measures that are increasingly acting as non-tariff barriers. The European Union's Deforestation Regulation (EUDR), which was introduced to address climate and environmental concerns, is an example. Sustainability concerns, among others, include repurposing agricultural subsidies, environmental impacts, food security, and regulatory barriers such as Sanitary and Phytosanitary (SPS) measures, which are intricately linked to the Sustainable Development Goals (SDGs). The paper summarises the current status of discussions within the framework of the Agreement on Agriculture (AoA). The Committee on Agriculture Special Session is a dedicated negotiating body engaged in critical aspects of food and agricultural trade, including domestic support, market access, export competition, the special safeguard mechanism, export restrictions, cotton, transparency, and the public stockholding program for food security. Critical issues, such as agricultural subsidies, export restrictions, export subsidies, genetically modified foods, sustainable food systems, SPS measures, and environmental concerns, are being increasingly integrated into the provisions of free trade agreements and are addressed in both bilateral and mega FTAs. The paper summarises the ongoing discourse around tariffs and unilateral trade protectionism, with the levying of very high tariffs by developed countries, as well as the unilateral measures adopted to justify them in the pursuit of sustainability and sustainable food systems. It highlights the key issues of contention, such as public stockholding for food security, the special safeguard mechanism, and cotton, which remain central to

the unfinished development agenda at the WTO. Multilateral issues, such as disciplining agricultural subsidies and domestic support available under different categories, export restrictions, and export subsidies, including export facilitation, remain unresolved. This paper also discusses the cross-cutting issues in bilateral agreements.

## II

### TRADE, EMISSIONS AND ENVIRONMENTAL SUSTAINABILITY

Measuring relationships between trade liberalisation, economic developments and environmental stressors that affect agricultural performance and value-added growth through SEM, it was found that rising final consumption demand drives the most significant value-added growth, followed by agricultural export integration. Moreover, economic expansion through trade creates environmental costs. However, higher CO<sub>2</sub> emissions per person lead to a nominal decrease in agricultural production.

Analysis of trade-related carbon emissions in Indian fruit exports, using the gravity model and applying IPCC emission factors, suggests that trade expansion leads to increased carbon emissions. Moreover, international climate agreements, including the Kyoto and Paris Agreements, have led to increased emissions due to enforcement weaknesses and trade loopholes. However, multilateral and regional agreements, such as WTO membership and RTAs, decrease emissions through technology sharing and standard implementation. The results of panel econometrics indicate that economic indicators yield conflicting outcomes, as population growth and foreign direct investment lead to reductions in emissions, whereas GDP per capita exhibits non-linear effects. The increasing demand for Indian agricultural exports necessitates that governments implement carbon reduction measures in trade operations and develop sustainable transportation systems to achieve environmental targets.

Macro level scrutiny of India's environmental expenses from economic development through the analysis of five essential indicators, including CO<sub>2</sub> emissions, CO<sub>2</sub> GDP emission intensity, renewable energy usage and forest area measurements throughout the WTO regime, suggests that WTO-based globalisation led to increased GDP growth in India but simultaneously increased environmental strain through rising emission levels. Moreover, trade liberalisation policies create conflicts with domestic food security needs and environmental protection requirements while advocating for integrated policies that unite trade requirements with environmental protection and food security.

India's fast-growing horticultural export sector, after WTO implementation, created major environmental concerns, because of excessive consumption of water resources, pesticides and produces carbon emissions from transportation networks,

which threaten the long-term sustainability of horticultural exports. Therefore, export development needs to maintain a synchronised relationship with environmental sustainability for successful growth.

Research at the individual farm and business organisation levels, through a carbon footprint evaluation of Haryana's basmati and non-basmati rice cultivation, reveals that different crop varieties and farming techniques produced wide-ranging emission levels, spanning from 5.2 to 23.2 metric tons of CO<sub>2</sub> per hectare. The residue burning produced 66-76% of total emissions during high-emission periods. However, basmati rice varieties produced slightly fewer carbon emissions than non-basmati varieties, while direct-seeded rice (DSR) methods generated 5% fewer emissions than traditional puddled transplanting methods. The research yields valuable insights into how improved residue management and direct-seeded rice cultivation can reduce carbon emissions in rice cultivation while maintaining crop yields, thereby promoting climate-resilient agriculture.

The industrial sustainability of Indian food processing companies at the organisational level, through environmental compliance, technological investments, and automation, suggests that businesses following environmental standards achieve better export results. The effect of environmental compliance on export performance of firms, as analysed using ASI data and a Tobit model, also supports this finding. Automation and advanced technology investments have failed to generate substantial export growth, but their impact has become more significant in terms of meeting high environmental compliance standards. Modern markets reward businesses that fulfil strict environmental standards because these companies access green markets and achieve operational efficiency. Thus, environmental sustainability goals can achieve dual benefits through the adoption of green technology and the development of a compliance system.

Therefore, economic expansion through consumption should occur alongside better resource management and trade policies that support environmental sustainability, thereby maintaining agricultural sustainability. Moreover, export expansion without protecting food security and environmental resources leads to unsustainable outcomes, so policies need to adopt holistic approaches. And the trade policy maintains a strong connection with environmental sustainability. The expansion of trade under WTO rules has led to economic growth, but it has also created environmental challenges and contributed to resource depletion. Therefore, sustainable development requires three essential elements: sustainable practices, clean technologies, and integrated policies that reduce environmental trade-offs. The research confirms that India needs to link its trade development with its environmental concerns and sustainable natural resource availability.

### III

Research studies in this area demonstrate that WTO tariff reductions have not eliminated the growing influence of health and safety regulations, which determine market entry for Indian agricultural products. SPS measures and emergency notifications to raise standards have affected the regional trade of multiple agricultural products among BIMSTEC member countries, which could remain unexported due to pest outbreaks, food safety concerns, and plant and animal health issues, with a few exceptions, causing substantial trade disruptions. Although SPS notifications, which focus on animal health and food safety, create trade barriers, notifications with multiple protection goals, including plant and human health, can also lead to trade growth. The SPS notifications also affected border rejections of Basmati rice exports from India due to exceeding the set norms and standards of food safety regulations for pesticide residue limits in target countries, such as the EU and the US. However, food safety standards in Saudi Arabia and those of Codex (FAO/WHO) align more closely with Indian requirements than those of other countries.

India's dairy sector, which leads the world in milk production, yet remains insignificant in worldwide dairy market participation because of unexploited dairy export markets, primarily in Mexico, the EU and China, particularly in three main dairy products, such as skimmed milk powder, butterfat and casein, on account of exceeding SPS standards limits, labelling, and unauthorised additives. This requires better regulatory compliance and an enhanced quality infrastructure, including improved labelling and residue testing, as well as the development of a cold chain, to succeed in international dairy markets.

It emerged from the papers that India faces recurring challenges of regulatory standards deficits for its agricultural exports. The implementation of strict SPS measures may help to remove trade barriers and protect consumer health while motivating Indian producers to enhance their product quality. The recommended policy solutions for SPS measures include active participation in WTO SPS committees to establish science-based standards, as well as farmer and exporter training programs for global standard compliance, domestic testing, and certification system development. Additionally, mutual recognition agreements should be negotiated for effective implementation. This approach aims to reduce SPS-related trade obstacles while enabling the country to maximise its advantages in agricultural exports.

#### IV

##### REGIONAL TRADE AGREEMENTS AND AGRI-TRADE DYNAMICS

Multiple research papers examine the impact of regional trade agreements (RTAs) on India's agricultural trade with its primary regional trading partners. India's participation in major RTAs such as SAPTA/SAFTA, APTA, ASEAN, MERCOSUR and GSTP countries based on their GDP, population, distance, and institutional

quality that affects the efficiency of its agri-food exports to 67 countries to determine export performance relative to potential levels has been analysed through SFGM. The SFGM results show that India's agri-export efficiency improves when its trading partners have larger economies, larger populations, and favourable exchange rates. The distance between countries and the domestic population size act as negative factors that decrease export efficiency. The research indicates that all RTAs, except SAPTA, have a significant positive effect on export efficiency. However, Indian exports remain below their maximum potential levels.

India-Nepal agricultural trade relations, considering their historical agreements and border connections, were analysed through the Trade Complementarity Index (TCI) to demonstrate that India-Nepal trade expanded substantially to match Nepal's import requirements at high levels. However, Nepal exports few goods that India needs, resulting in a trade imbalance and instability. The trade imbalance can be corrected through improved transportation links, standardised regulations, and support for Nepali businesses. Trade between India and Afghanistan before and after the implementation of SAFTA remains minimal, but has expanded marginally after SAFTA's implementation. However, the actual trade levels remain significantly lower than what the countries could achieve based on their supply-demand dynamics, despite having the potential to expand substantially. Afghanistan's security problems and its weak infrastructure, along with India's protective trade policies due to strategic concerns, remain the main obstacles. The establishment of better diplomatic relations and the reconstruction of transportation networks, along with SAFTA trade facilitation programs, would create substantial opportunities for agricultural trade, thereby enhancing Afghan food security and opening new markets for Indian exporters.

The case study illustrates how SAFTA and similar regional agreements often fail to reach their full potential due to obstacles that extend beyond economic factors. The successful implementation of regional trade integration requires countries to invest more political resources into building capacity for their less developed trading partners. India should focus on building trade relationships with countries that demonstrate stability and high export potential, while expanding RTA coverage to additional products and sectors, and working to eliminate non-tariff trade barriers. The proposed actions will enhance the global market integration of Indian agricultural products, enabling the country to tap its untapped export potential.

V

#### AGRICULTURAL EXPORT PERFORMANCE AND COMPETITIVENESS

India's long-term agricultural trade in essential commodities, including cotton, pulses, vegetable oils, sugar, and fresh produce, expanded significantly because most exported products showed increasing trends, and the nation gained international market share starting from the mid-1990s. Fresh fruits and vegetables became leading

export products; however, vegetable oils dominated Indian import statistics due to domestic supply shortages. The post-WTO period brought about a better comparative advantage (RCA indices) for Indian exports of cotton, pulses, and sugar, and this stability increased due to a decrease in export variability through its growing integration with global markets. However, the export of coffee failed to maintain its growth pattern.

The trade liberalisation and agricultural sector reforms of the 1990s strengthened India's agricultural export performance; yet, ongoing policy support remains essential for maintaining market competitiveness. Indian agricultural exports have joined the top ten agricultural exporters worldwide by delivering a range of agricultural products to international markets. India's export growth occurred during a period of changing global political relationships and evolving environmental standards, which India managed through its strategy of balancing export development with food security protection for domestic markets.

The onion market serves as a vital food source for Indians and generates foreign exchange earnings, which remains a politically sensitive mass consumption agricultural produce. Therefore, a slight reduction in export volumes is necessary during years when India faces onion deficits to maintain market stability.

Indian saffron exports have experienced significant expansion but still face instability, variations, and inconsistent market leadership due to fluctuating RCA values, which indicate periodic patterns that reveal structural elements, including crop patterns and worldwide market trends, that affect market volatility. The primary risk factor for saffron exports stems from their concentration in a single country, Hong Kong, which suggests the need for market diversification.

The growth pattern, market stability, and export competitiveness of fruits and horticulture in Haryana and India suggest a rise in citrus, with strong potential for further growth. Guava, banana, and papaya production remained stable, while mango production declined. However, these produce a lack of strong competitive international fruit markets and are used for the domestic market. Targeted interventions for specific crops and improved infrastructure, including cold storage and processing facilities and strategic export promotion to enhance Indian fruit market competitiveness by improving product quality and developing specific crop varieties which match international market requirements are needed.

The ginger crop from Karbi Anglong in Assam demonstrates consistent export strength through its high comparative advantage. At the same time, Meghalaya's Lakadong turmeric and Nagaland's Naga mircha (chilli) have shown increasing export competitiveness. The export performance of various indigenous rice varieties (Joha, Chakhao, Wakro), Tamenglong oranges, and Queen pineapple from Tripura remains uncompetitive, despite their local popularity and substantial production levels. Sikkim achieves success through its large cardamom production.



Needless to emphasise that having distinctive produce/product does not guarantee export success because businesses need to achieve sufficient production levels, maintain high product quality and establish effective market connections.

The NER products, therefore, require targeted interventions that should focus on improving cultivation methods, processing, and value-adding activities to meet international standards, as well as developing better market connections and product branding. The agricultural diversity of NER can become more effective for export purposes through proper support, which will benefit regional development and increase Indian export numbers. India's processed high-value food exports have expanded, including those of cereals, spices, edible oils, beverages, and confectionery. The rising imports of processed food products demonstrate that higher income levels create new market opportunities which exceed what domestic manufacturers can produce. The research identifies two main problems that affect the sector, namely post-harvest losses and weak supply chains, which create sustainability and profitability challenges. The lack of proper cold storage facilities and transportation systems leads to significant food waste in perishable products, resulting in increased dependence on imported goods.

India's soybean export-import volatility experiences frequent shifts between export and import activities due to fluctuations in domestic production levels and global market prices. The market behaviour of soybean exports is influenced by two main factors that affect their stability: domestic supply conditions and global market demand patterns. The expansion of soybean cultivation and processing in India would help the country reduce its dependence on global markets for edible oils while protecting its economy from price fluctuations.

India maintains its position as a leading global cotton producer, with intra-industry trade (IIT) between countries through the export and import of similar products. It illustrates the development of the manufacturing sector and increased participation in the higher value chain. Its raw cotton export volumes have decreased worldwide in recent years, and its import share in global trade has exceeded, as India buys premium cotton fibres and speciality materials but exports surplus or inferior cotton products. However, processed cotton product exports from India have grown while the country imports fewer processed cotton goods.

The WTO, together with trade liberalisation, has created favourable conditions which drive export expansion while helping India join international markets. India utilises its natural advantages to export rice, spices, and cotton textiles, which have made it a leading exporter. The export growth remains unstable because it depends on a few markets, requires policy changes and limited product diversity. The challenges of competitiveness with many agricultural products persist because farmers lack sufficient productivity and product quality to succeed in exports (fruits and some NER products), and external standards create trade barriers (SPS issues).

The country needs to maintain a balance between exporting products and meeting domestic food requirements because export restrictions on pulses and edible oils help control market prices. The researchers support the development of new export markets through quality improvement and proper policy support to achieve lasting export growth. The country needs to develop its storage facilities and processing centres and build its brand reputation for distinctive products while securing better market entry terms abroad.

The research recommends additional measures to develop climate-resistant farming methods, expand export product diversity and build institutional capacity for long-term export growth in India. The post-liberalisation agricultural sector has achieved success through Indian export growth; however, the country needs to address climate-related risks and market instability, while also protecting its domestic food security needs.

## VI

### CROSS-CUTTING ISSUES

Various research studies present common themes, providing essential knowledge for developing effective agricultural trade policies.

The research indicates that countries must balance their domestic needs with their willingness to participate in international trade. The expansion of exports through trade liberalisation has brought economic growth to farmers, but it creates price instability and food shortages in domestic markets (onions and rice). Research studies on onions and a rice export ban simulation demonstrate that using trade restrictions as a control measure produces conflicting results, as these measures help stabilise prices but harm farmers and decrease national welfare. The implementation of strategic reserves, in conjunction with export quotas and variable tariffs, would help protect against extreme market situations while preserving trust in the export market.

The current agricultural trade market requires producers to fulfil strict quality and safety requirements, which include SPS measures and MRLs. The research demonstrates that Indian farmers need to meet international safety standards to access foreign markets for their agricultural products. The government, together with industry, must establish testing facilities and certification systems and product tracking systems to verify products match importing countries' regulations (as demonstrated in Basmati and dairy export research). The country should actively participate in the development of international standards to create fair standards based on scientific evidence. Modern export promotion requires more than financial support and marketing efforts, as it demands the complete development of the value chain to achieve standardised, certification-ready products.

Studies across various agricultural sectors demonstrate that insufficient infrastructure development creates significant obstacles to trade competitiveness. The absence of proper cold storage facilities and refrigerated transportation systems leads to product deterioration and environmental damage, according to research in horticulture and fruit exports. The combination of poor rural transportation networks and inadequate logistics systems drives up production expenses while decreasing the amount of money farmers receive from their exported products. The development of pack-houses and warehouses, efficient ports and logistics networks will decrease transaction expenses while enhancing delivery dependability. The construction of processing facilities near agricultural production areas will enhance product value while minimising the need for transporting raw materials in large quantities.

The research suggests that India should expand its export market reach by introducing new products to diversify its market presence and reduce its dependence on limited markets. The saffron market study demonstrated that the industry is heavily dependent on one market, while Basmati rice exports became vulnerable when the EU and US imposed trade restrictions. The expansion of export markets through diplomatic efforts, brand development in new markets and trade exhibition participation helps distribute business risks. The agricultural sector should expand its product range by developing processed foods, nutraceuticals and regional specialties to achieve more stable export growth. The North East commodities paper demonstrates that specific local products have the potential to become exportable goods when appropriate support systems are implemented, thereby connecting distant areas to international trade networks.

Research on regional studies demonstrates that South Asia, along with its surrounding areas, presents substantial untapped trade opportunities for India. The combination of cultural ties and geographical proximity creates substantial market potential for Indian farm products; however, regional trade levels remain below their potential due to political barriers and insufficient trade facilitation and protective measures. The expansion of SAFTA and BIMSTEC trade agreements, combined with solutions for border procedure optimisation, standard recognition, and improved transportation links between India and Nepal, will boost agricultural exports. The initiative will create advantages for India and its neighbouring countries through reduced food costs and enhanced food security. The strategy provides a strategic alternative to depending on distant developed markets.

The most essential common challenge involves creating sustainable export growth that protects both the environment and society. The trade-environment studies demonstrate that trade expansion should avoid damaging sustainable resource management and high emission levels.

The paper writers have employed advanced analytical methods, including SEM, SFGM, CGE models, wavelet analysis, and panel econometrics, which

demonstrate how India's agricultural economics has developed its analytical capabilities to study complex, interconnected problems. The combination of advanced data collection with researcher collaboration will produce detailed policy guidance for decision-makers. The agricultural data system and analytical research sector require additional funding to address existing knowledge gaps regarding consumer behaviour in processed foods and real-time trade and emission tracking.

## VII

### ISSUES FOR DISCUSSION

In view of the various issues discussed in the papers submitted for discussion under this theme and the issues raised in the outline for this theme, the following issues require in-depth discussions and deliberations to inform policy recommendations.

- 1) Papers on this theme are analytically vibrant with statistical precision validated through various models. How can some of these papers be linked with theoretical rigour, so that they can contribute towards the advancement of theoretical treatises of trade relations and development with environmental sustainability?
- 2) The WTO was established with the objective of trading by rules, not by politics. How far has this objective been fulfilled to accommodate the interests of developing and least developed countries? Can the political economy framework of analysis help us to understand the dynamics of gains from trade better with regard to the agriculture of developing and least developed countries?
- 3) How will sustainability-linked unilateral non-tariff barriers impact agricultural trade and the livelihoods of people in the developing and least developed countries? To what extent will these measures mitigate climate change effects?
- 4) How will the integration of critical issues into the provisions of free trade agreements, such as agricultural subsidies, export restrictions, genetically modified foods, and sustainable food systems, both in bilateral and free trade agreements, impact the multilateral trading system?
- 5) To what extent will the evolving trading system address the structural challenges faced by the global south? What will be the implications of legal obligations that may arise from the ongoing trade negotiations, and whether these measures will balance different dimensions of sustainability?
- 6) What are the different types of protection used by the developed countries under the guise of special agricultural safeguard measures, and their implications for the developing and least developed countries?
- 7) What are the challenges in finding a permanent solution to public stock holding to address food security issues in developing countries? What is the

current status of negotiations in this regard, and what could be the possible solutions?

- 8) How can countries implement policies that promote carbon sequestration in agriculture, while balancing trade competitiveness?
- 9) To what extent can unilateral measures, such as EUDR, promoting environmental objectives, act as disguised trade protectionism? What are the possible impacts of such measures on smallholder agriculture, workers, socioeconomic inclusivity, migration and mitigating climate change?
- 10) How can international trade agreements be structured to address the unique vulnerabilities of smallholders and resource-poor farmers while ensuring inclusivity?
- 11) Should there be binding commitments on environmental sustainability within trade agreements, and if so, how can they be enforced equitably?
- 12) What are the challenges, opportunities, and likely obligations for developing and least developed countries under the multilateral trade and environment negotiations?
- 13) What reforms are necessary to ensure a level playing field for low-income or resource-poor farmers and address the concerns of developing countries about inherent imbalances in the AoA?
- 14) How can countries frame effective domestic policies to ensure food security and balance socio-economic and environmental sustainability? What are the significant factors that can influence such policy-making decisions?
- 15) How can the WTO's trade-related intellectual property rights affect the sustainable use of medicinal flora in South Asia, including sourcing, valuation, conservation, and pricing?
- 16) What are the challenges in preserving the community's knowledge of medicinal flora and ensuring equitable benefits to local and marginalised communities under the multilateral trade regime?

#### REFERENCES

- Bastable, C.F., (1903): *The Theory of International Trade, with Some of its Applications to Economic Policy*, 4th ed., Macmillan and Co, London and New York.
- Cassel, Gustav (1916): *Situation of the Foreign Exchange*, *The Economic Journal*, vol.26, no.104: 64-67 and (1918): *Abnormal Deviations of International Exchanges*, *The Economic Journal*, vol. 28, no. 112: 413-415.
- Diwakar, D. M. (2005): "Implications of New International Trade Regime on Indian Agriculture: Perspectives of Food Sovereignty" *The Indian Economic Journal*, 88th Annual Conference, Volume Part –I, Indian Economic Association, pp. 248-260.
- Fernandez, V. (2019): *A Readily Computable Commodity Price Index: 1900-2016*, *Finance Research Letters*, vol.31, pp.448-457.
- Grilli, E., R. and Maw Chang Yang (1988): *Primary Commodity Prices, Manufactured Goods Prices, and the Terms of Trade of Developing Countries: What the Long Run Shows?* *The World Bank Economic Review*, Vol.2, No. 1, pp1-47.
- Haney, Lewis H., (1949): *History of Economic Thought*, Macmillan, New York, 3rd Edition.

- Heckscher, E. F., (1919): The Effect of Foreign Trade on the Distribution of Income, Sweden.
- Marshall, Alfred (1923): Money, Credit and Commerce, Macmillan, Landon, appendix
- Mill, J.S., (1848): Principles of Political Economy, John W. Parker, London.
- Ohlin, B., (1933): Interregional and International Trade, Harvard University Press.
- Pfaffenzeller, S., Newbold, P., & Rayner, A., (2007): A short Note on Updating the Grilli and Yang Commodity Price Index, The World Bank Economic Review, Vol.21, No.1, pp. 151-163.
- Prebisch, Raul, (1950): The Economic Development of Latin America, and its Principal Problems, United Nation, May,
- Quesnay, F., (1758): Tableau Economique/Economic Table,
- Singer, H.W., (1950): Distribution of Gains between Investing and Borrowing Countries, American Economic Review, Vol. 40, No. 2, pp.473-485.
- Smith, Adam, (1776): An Inquiry into the Nature and Causes of The Wealth of Nation, W. Strahan and T. Cadell, London, Book IV, Chapter I.
- Ricardo, David, (1817): On the Principles of the Political Economy and Taxation, John Murray, London.
- WTO (1998): Agreements Establishing The WTO- Series 1.
-